

ABSTRACT

A robot that includes an arm coupled to a platform. The arm includes an actuator that moves a second arm linkage relative to a first arm linkage. In a first mode of operation the actuator moves the second linkage in a first degree of freedom.

5 In a second mode of operation the actuator moves the second linkage in a second degree of freedom. The use of a single actuator to provide two degrees of freedom reduces the number parts and associated cost of the arm. The arm further includes a grasper that can grab an object such as a wheelchair. The robot can be used to push the wheelchair. Commands to operate the robot can be generated at a remote input
10 station and transmitted through a broadband network.